

Product Support Bulletin

SUBJECT: MS Windows 3.x Stylus 400/800+/Color Printer Driver problems
using the ActionPC/Tower-2000 Computers

Date: 11/5/94
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PSB No: PSB S-0179
Originator: DS

This bulletin provides procedures to implement a software solution to address printing problems using the printer driver ver 1.03E for the Stylus 400, 800+ and Color printers when connected to an Epson ActionPC-2000 and ActionTower- computers in the MS Windows 3.x environment.

*Some ActionPC/Tower-2000 computers, with the black **EPSON logo plate**, have a problem using the 1.03E version driver. The software solution is as follows:

1. From Windows **MAIN** program group, open **FILE MANAGER**.
Within File Manager, change to the **SYSTEM** sub-directory located in the Windows directory. Find the tile **EPSPLMGR.EXE** and double click on that tile to run/load it. This will open the **EPSON SPOOL MANAGER**.
2. From the **SPOOL MANAGER** screen, select the **QUEUE** "pull down" menu, then select **SETUP**.
3. From the **SETUP** screen, enable the **PRINT MANAGER** by clicking on that option.
4. Close the Spool Manager and exit File Manager.
5. Print a document and verify the solution is working correctly.

If this is not satisfactory, contact your nearest Epson Authorized Service Center for a hardware level solution.

*To verify if you need to follow the procedure in this bulletin, check if your system **SETUP** lists Printer port control. If it is listed, the parallel port allows PS/2 and AT selections, select AT(Unidirectional). See page A-3 in your computers User's Guide for **SETUP** instructions. If your computer has this option skip the instructions above.

Product Support Bulletin

SUBJECT: Common Questions and Answers for the EPSON ActionPC 2000/
ActionTower 2000 Computer

Date: 06/15/94
Page(s): 1 of 6

PSB No: PSB No: S-0177
Originator: SA

GENERAL

Q1. What is the Epson ActionPC 2000/Action Tower 2000 computer?

- A.** The ActionPC 2000/Action Tower 2000 is a full-featured desktop personal computer that has been designed to capitalize on the high performance and low cost of the Cyrix 486SLC processors. Key features include:

- . Cyrix 486SLC/33 or 486SLC2/50 processor
- . Local Bus Cirrus Logic GD5424 high speed video controller
- . 512KB video memory, upgradeable to 1 MB
- . True Color support at 640x480 resolution
- . ROM based Phoenix system BIOS "SETUP" program
- . Built in rechargeable NiCad battery to maintain CMOS settings

ACTION PC CONFIGURATION 1

• Desktop case incorporates

- Five 16 bit ISA expansion slots
- Three full-length and two half length drive bays
- One 3.5 inch wide, one-inch high internal drive bay
- One 3.5 inch wide, one-inch high and two 5.25 inch wide, half-height drive bays
- Built in bidirectional parallel, PS/2 keyboard, game and two 9-pin serial ports
- Built in floppy and IDE hard drive controller/interface
- 4MB of system RAM on SIMMs, upgradeable to 16MB via SIMMs
- 3.5 1.44 floppy disk drive, 210MB IDE hard disk drive. PS/2 mouse
- 96/48/24 FAX send/receive/data modem

• Bundled with:

- MS-DOS 6.21 (Includes - Installation Disks and Documentation)
- Microsoft Windows 3.11 (Includes - Installation Disks and documentation)
- Focal Point (Includes - Installation Disks and Documentation)
- PFS: Window Works (Includes - Documentation only)
- Quicken (Includes - Documentation only)
- Hoyle's Classics (Includes - Documentation only)
- Russian 6-Pack (Includes - Documentation only)
- America On-Line (Includes - Documentation only)
- CompuServe (Includes - Documentation only)
- The Even More Incredible Machine (Includes - Documentation only)

Q1. *What is the Epson ActionPC 2000/Action Tower 2000 computer?(continued)*

TOWER CONFIGURATION

. Tower case incorporates

- Five 16 bit full-length ISA expansion slots
- One 3.5 inch front and two 3.5 inch wide rear mount internal half-height drive bays
- Two 3.5 inch wide third height external drive bays
- 4MB/8MB of system RAM, on SIMMs, upgradeable to 16MB via SIMMs
- ROM based Phoenix system BIOS "SETUP" program
- Built in rechargeable NiCad battery to maintain CMOS settings
- 3.5 1.44 floppy disk drive, 210/420MB IDE hard disk drive. PS/2 mouse
- 96/48/24 FAX send/receive/data modem
- 16 bit stereo sound card
- 2x speed CD-ROM drive

. Bundled with:

- MS-DOS 6.2(Includes - installation Disks and Documentation)
- Microsoft Windows 3.11 (Includes - Installation Disks and Documentation)
- Focal Point(Includes - Installation Disks and Documentation)
- PFS: Window Works(Includes - Documentation only)
- Quicken(Includes - Documentation only)
- Hoyle's Classics(Includes - Documentation only)
- Russian 6-Pack(Includes - Documentation only)
- America On-Line(Includes - Documentation only)
- CompuServe(Includes - Documentation only)
- The Even More Incredible Machine(Includes - Documentation only)
- Comptons Interactive Encyclopedia(CD-ROM, Complete with Documentation)
- Berenstein Bears: Learning at Home I(CD-ROM, Complete with Documentation)
- KGB/CIA World Fact Book(CD-ROM, Complete with Documentation)
- Paramount Interactive's Movie Select(CD-ROM, Complete with Documentation)

Q2. *What interfaces and controllers are integrated on the motherboard?*

- A.** The Epson ActionPC 2000/Action Tower 2000 computer comes standard with a built-in IDE hard disk drive interface, and floppy disk drive controller, a super VGA video adapter, two serial interfaces, a bidirectional parallel interface, PS/2 style keyboard port and game port all integrated on the main system board.

Q3. *What microprocessor comes standard with the Epson ActionPC 2000/Action Tower 2000 computer?*

- A.** The Epson ActionPC 2000/Action Tower 2000 computer comes standard with Cyrix 486SLC2/50 clock-doubled CPU. This microprocessor provides backward compatibility with Intel 8088, 8086, 80286 and 80386 CPUs and includes a built in 1 K cache.

CPU

Q4. *What microprocessor upgrades are available for the Epson ActionPC 2000/Action Tower 2000 computer?*

- A.** The Cyrix 486SLC microprocessor can not be upgraded, it is soldered on the mainboard.

The Cyrix 83S87 33/25MHZ math co-processor can be added to the main board to increase the speed of the floating point operations.

BIOS

Q5. *What BIOS comes with the Epson ActionPC 2000/Action Tower 2000 computer?*

- A.** The ActionPC 2000/ Action Tower 2000 computer incorporates an Phoenix Bios that contains both the system and video BIOS. This BIOS is contained in a single EPROM device that is installed in a pluggable socket on the computer's main logic board.

Q6. *How is the computer's SETUP program accessed and what information is contained in setup?*

- A.** To access the computer's SETUP program, press F2 during the computer's boot process.

STANDARD SYSTEM PARAMETERS

	DEFAULTS
- System Time and Date	Current Time/Date
- Floppy Drive Type Selection A: B:(5.25" 360/1.2 and 3.5" 720/1-44)	3.5" , 1.44MB
- HDD Drive Type Selection 1: 2:(Auto Detect, Type No. or User-Defined)	Auto Detect 1
- Base Memory	640KB
- Extended Memory	4MB or 8MB
- Video Type (VGA/EGA, CFA40, CGA80, Mono and not installed)	VGA/EGA
- Keyboard (Installed/ Not Installed)	Installed
- CPU Speed (Fast/Slow)	Fast
- NumLock on at boot (Yes/No)	ON
- Internal cache (Enabled/ Disabled)	Enabled

M1217 CHIP SET FEATURE CONTROL

	DEFAULTS
-Relocate Memory (Enabled/Disabled)	Enabled
-Shadow Bios ROM (Always Enabled)	Enabled
-Shadow 32K at C800h(Enabled/Disabled)	Enabled
-Shadow 64K at D000h(Enabled/Disabled)	Disabled
-Shadow 64K at E000h(Enabled/Disabled)	Disabled
-ISA 1 wait state(Enabled/Disabled)	Disabled
-Slow Refresh(Enabled/Disabled)	Disabled

Q7. What video adapter comes standard(built in) with the Epson ActionPC 2000/Action Tower 2000 computer?

- A.** The ActionPC 2000/ Action Tower 2000 computer utilizes a Cirrus Logic GD5424 high-speed super VGA local bus on-board controller. This system includes 512KB of video memory which may be upgraded to full 1 MB of memory by installing four (4) pluggable DRAM(44256., 70ns)chips.

The Cirrus Logic SVGA Graphics controller is 100% hardware and BIOS-compatible with IBM VGA display standards.

Q8. What type of VRAM chips are used to upgrade the video memory to a 1MB on the ActionPC 2000/Action Tower 2000 computer?

- A.** To increase the computer's video memory requires four pieces of a 256KB x 4 bit, 70ns, DRAM in a 20 pin DIP(Dual In-line Package)Package. These chips install on the computer's main logic board in sockets U13, U14, U15, U16.

Q9. What Video modes are supported by the Epson ActionPC2000/ActionTower 2000 computer?

- A.** The list below is a table that shows the Epson ActionPC 2000/ ActionTower 2000 computer's supported video modes and the memory requirements to obtain each mode.

Resolution	Memory Requirements	Color	Refresh Rates HZ	Remarks
640X480	512KB	256	60/72	8BITS/PIXEL
640X480	1MB	32K/64K	60/72	16BITS/PIXEL
640X480	1MB	16.7M(TC)	60/72	24BITS/PIXEL
800X600	512KB	256	56/60/72	8BITS/PIXEL
800X600	1MB	32K/64K	56/60/72	16BITS/PIXEL
1024X768	512KB	16	43.5/60/70/72	4BITS/PIXEL
1024X768	1MB	256	43.5/60/70/72	8BITS/PIXEL
1280X1024	1MB	16	43.5	4BITS/PIXEL

Q10. What software video drivers are provided with the Epson ActionPC 2000/Action Tower 2000 computer?

- A.** There are two diskettes included that feature video drivers for many popular software programs and also include video utilities. Microsoft Windows 3.1 drivers are pre-loaded on the hard drive. All other video drivers are available on EPSON's BBS or CompuServe(Windows 3.X, Windows NT, DOS and OS/2 2.x).

The VGA video utilities included are: SETRES and CLMODE. These utilities are useful when customizing system settings such as video modes resolution modes for custom programs.

MEMORY**Q11. What is the standard memory configuration and maximum amount of system memory that can be used in the Epson ActionPC 2000/Action Tower 2000 computer?**

- A.** The Epson ActionPC 2000/Action Tower 2000 computer comes standard with 4MB or 8MB system memory. This memory is provided by 1MB(1x9) or 4MB(1x9) SIMM(s).

There is a total of four SIMM sockets on the main system board. These sockets accept 1MB(1x9), 4MB(1x9) SIMMS. Optional SIMMs may be purchased to increase the computer's memory up to a maximum of 16MB.

Q12. What are the valid system memory configurations for the Epson Action PC2000/ActionTower 2000 computer?

- A.** Listed in the table below shows all valid system memory configurations for the Action PC 2000/ActionTower 2000.

BANK 0(RAM 1 and RAM 2)	BANK 1 (RAM 3 and RAM 4)	Total Memory
1MB	X	2MB
1MB	1MB	4MB
4MB	X	8MB
4MB	4MB	16MB

NOTE: The SIMMs used must be tin-plated, 70ns or faster, 30pin, 8-bit or S-bit, fast page mode type.

MASS STORAGE

Q13. What factory floppy and hard disk drive configurations are offered with the Action PC 2000/Action Tower 2000 computer?

A. The Epson ActionPC 2000/Action Tower 2000 computer is shipped with the following configurations.

ActionPC 2000

- one 3.5" 1.44MB floppy disk drive
- one 210MB IDE hard disk drive

ACTION TOWER 2000

- one 3.5" 1.44MB floppy disk drive
- one 210MB or 420MB IDE hard disk drive